

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference	See Notification of Transmittal of International Preliminary Examination Report	
2003-13-PCT		
International application No.	International filing date (day/month/year)	Priority date (day/month/year)
PCT/US03/40872	22 December 2003 (22.12.2003)	23 December 2002 (23.12.2002)
International Patent Classification (IPC) or national classification and IPC		
IPC(7): C08J 5/06 and US Cl.: 156/335, 910; 152/565; 428/296.4		
Applicant		
INVISTA TECHNOLOGIES S.A RL.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 3 sheets, including this cover sheet.

This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 14 sheets.

3. This report contains indications relating to the following items:

- I Basis of the report
- II Priority
- III Non-establishment of report with regard to novelty, inventive step and industrial applicability
- IV Lack of unity of invention
- V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI Certain documents cited
- VII Certain defects in the international application
- VIII Certain observations on the international application

Date of submission of the demand	Date of completion of this report
21 June 2004 (21.06.2004)	20 February 2005 (20.02.2005)
Name and mailing address of the IPEA/US Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized officer Geoffrey L. Knable Telephone No. 571-272-1700 <i>Jean Prost Patent Specialist</i>

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

Internal Application No.

PCT/US05/40872

I. Basis of the report

1. With regard to the elements of the international application:*

 the international application as originally filed. the description:pages 1-46 as originally filedpages NONE filed with the demandpages NONE, filed with the letter of _____ the claims:pages NONE, as originally filedpages NONE, as amended (together with any statement) under Article 19pages NONE, filed with the demandpages 47-60, filed with the letter of 01 February 2005 (01.02.2005) the drawings:pages NONE, as originally filedpages NONE, filed with the demandpages NONE, filed with the letter of _____ the sequence listing part of the description:pages NONE, as originally filedpages NONE, filed with the demandpages NONE, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

 the language of a translation furnished for the purposes of international search (under Rule 23.1(b)). the language of publication of the international application (under Rule 48.3(b)). the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

 contained in the international application in printed form. filed together with the international application in computer readable form. furnished subsequently to this Authority in written form. furnished subsequently to this Authority in computer readable form. The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished. The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.4. The amendments have resulted in the cancellation of: the description, pages NONE the claims, Nos. 24-31 the drawings, sheets/fig NONE5. This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. STATEMENT**

Novelty (N)	Claims <u>1-21 and 32-70</u>	YES
	Claims <u>22 and 23</u>	NO
Inventive Step (IS)	Claims <u>NONE</u>	YES
	Claims <u>1-23 and 32-70</u>	NO
Industrial Applicability (IA)	Claims <u>1-23 and 32-70</u>	YES
	Claims <u>NONE</u>	NO

2. CITATIONS AND EXPLANATIONS

Claims 1-21 and 32-70 lack an inventive step under PCT Article 33(3) as being obvious over AITKEN (US 3,318,750) in view of what applicant acknowledges in the description as known. AITKEN discloses reinforced rubber articles and methods for their formation in which polyester fibrous materials including cords are precoated with a water-based composition that includes resorcinol, formaldehyde and a triallyl cyanurate ("component 1") as well as rubber latex (in "component 2"), the coating being fixed to the cord under heat (col. 3, lines 69-71). The coated fibers/cords are then embedded in rubber, which is then cured (col. 4, lines 7-14). Further, the patent suggests relative molar amounts of resorcinol and formaldehyde (col. 2, lines 1-8) as well as the percent latex solids (col. 2, lines 40-41) and coating weights (col. 3, lines 61-68) consistent with those claimed. Further, responsive to applicant's arguments, in view of page 2 of the description where it is stated that "[u]sually, fiber producers pretreat the yarn with finish chemicals (e.g. silanes). Therefore, the resulting adhesive activated (AA) yarns provide an enhanced adhesion with a final adhesion system," it is considered to have been obvious to utilize preliminarily adhesive activated polyester yarns with the adhesion system of AITKEN. AITKEN, taken in view of what applicant acknowledges as known, is therefore considered to render obvious the claimed method/material/article.

Claims 1-14, 18-21, 32-44, 48-62 and 66-70 lack an inventive step under PCT Article 33(3) as being obvious over RYE et al. (US 3,226,276) in view of what applicant acknowledges in the description as known. RYE et al. discloses reinforced rubber articles and methods for their formation in which polyester fibrous materials including cords are precoated with a water-based composition that includes resorcinol and formaldehyde as well as rubber latex (e.g. claim 1 of the patent), the coating being fixed to the cord under heat (e.g. col. 4, lines 11-14). The coated fibers/cords are then embedded in rubber, which is then cured. Further, the patent suggests relative molar amounts of resorcinol and formaldehyde (col. 3, lines 1-26) as well as the percent latex solids (e.g. col. 4, line 60) consistent with those claimed. Further, responsive to applicant's arguments, in view of page 2 of the description where it is stated that "[u]sually, fiber producers pretreat the yarn with finish chemicals (e.g. silanes). Therefore, the resulting adhesive activated (AA) yarns provide an enhanced adhesion with a final adhesion system," it is considered to have been obvious to utilize preliminarily adhesive activated polyester yarns with the adhesion system of RYE et al. RYE et al., taken in view of what applicant acknowledges as known, is therefore considered to render obvious the claimed method/material/article.

Claims 22 and 23 lack novelty under PCT Article 33(2), and thus lack an inventive step under PCT Article 33(3), as being anticipated by VAN GILS et al. VAN GILS et al. discloses an aqueous topcoat composition including resorcinol and diene rubber latex that also need not include an aldehyde (col. 1, lines 33-48). VAN GILS et al. is therefore considered to anticipate the topcoat composition as defined in the amended claims.

Claims 1-23 and 32-70 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

----- NEW CITATIONS -----

US 3,226,276 A (RYE et al.) 28 December 1965 (28.12.1965), column 3, lines 1-26.

US 3,888,805 A (VAN GILS et al.) 10 June 1975 (10.06.1975), column 1, lines 33-48.